COMPOSITION AND METHOD FOR INHIBITING PLATELET AGGREGATION

ABSTRACT

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This invention is directed to a method of preventing or treating diseases or conditions associated with platelet aggregation. The method is also directed to a method of treating thrombosis. The method comprises administering to a subject a pharmaceutical composition comprising a therapeutic effective amount of P2Y₁₂ receptor antagonist compound, wherein said amount is effective to bind the P2Y₁₂ receptors on platelets and inhibit ADP-induced platelet aggregation. The P2Y₁₂ receptor antagonist compounds useful for this invention include mononucleoside 5'-monophosphates, mononucleoside polyphosphates, and dinucleoside polyphosphates of general Formula I, or salts thereof. The present invention also provides novel coompounds of mononucleoside 5'-monophosphates, mononucleoside polyphosphates, and dinucleoside polyphosphates. The present invention further provides pharmaceutical formulations comprising mononucleoside 5'-monophosphates, monophosphates, mononucleoside polyphosphates, or dinucleoside polyphosphates.